JAN 2 5 2005 E

PTO/SB/80 (11-04)
Approved for use through 11/30/2005. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction ABOV 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

	· · · · · · · · · · · · · · · · · · ·							
I hereby r		ous powers of attorney of	given in the	applica	ition identified	in the at	tached state	ment under
I hereby a								
X Pract	itioners associated	d with the Customer Number:	22428					
OR								
Pract	itioner(s) named b	elow (if more than ten patent p	ractitioners ar	e to be n	amed, then a cus	tomer num	ber must be use	ed):
	· · · · · · · · · · · · · · · · · · ·	Name	Registration Number		<u> </u>	Name		Registration Number
\vdash					<u>-</u>			
			·	┪╬┝╾				
 								
	a) == ====t/a) ta =	present the undersigned before	re the United S	States Pa	tent and Tradema	ark Office (USPTO) in con	nection with
any and all	patent applications	s assigned <u>only</u> to the undersigned belows assigned only to the undersignance with 37 CFR 3.73(b).	ned according	to the L	ISPTO assignmer	nt records o	or assignment d	ocuments
		dence address for the applicat	ion identified i	n the atta	ched statement u	nder 37 Cf	FR 3.73(b) to:	
1 10030 010	igo tilo comosperi	aonos adanoss for are apprisa-						
X T			224	128	8			
OR	ne address associ	ated with Customer Number:		T <u></u>	<u> </u>			
	Firm or							
Individual Name								
Address								
City			State				Zip	
Country		· · · · · · · · · · · · · · · · · · ·	<u> </u>					
					Fax			
Telephone								
Assignee N	ame and Address	O-1:4:	n Ingtitute	of To	obnology	 -		
J		Camorni	a Institute ast Califor					
		· — •	ena, Calif					
			eria, Caiii ed States					
						ine	uivalant) is so	auired to be
filed in as	ch application	ether with a statement un	d. The state	ment u	nder 37 CFR 3.	.73(b) ma	y be complet	ea by one or
filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee,								
and must	identify the ap	plication in which this Po	wer of Atto	ney is	to be filed.			
	The indivi	SIGNA dual whose signature and title	TURE of Assi is supplied be	gnee of clow is a	Record uthorized to act o	n behalf of	the assignee	
Signature		1 donated	e			Date 2	9 Decen	1602004
Name	Adam Cochr	an				Telepho	ne626-39	. ,
Title		roperty Counsel, Calif	ornia Instit	ute of	Technology			

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 049411-0248

n re patent application of Yu-Chong TAI, et al.

Group Art Unit: 1753

Examiner: Not Yet Known

Serial No. 10/603,573

Filed: June 24, 2003

1.

2.

Microfluidic Devices And Methods With

Electrochemically Actuated Sample Processing

CERTIFICATE UNDER 37 C.F.R. §3.73(b)

We, California Institute of Technology, a corporation of the state of California, together with City of Hope, a non-profit public benefit corporation of the state of California, certify that we are the assignees of the entire right, title and interest in the patent application identified above by virtue of either:

- A. [X] An assignment from inventors Yu-Chong TAI, Jun XIE, and Qing HE, of the patent application identified above, for which a copy thereof is attached. OR
- B. [] A the

ain of title from the inventor(s), of the patent application identified above, to urrent assignee as shown below:
Assignment
From:
To:
The assignment document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
Assignment
From: To:
The assignment document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

Serial No. 10/603,573 Attorney Docket No. 049411-0248

3. Merger/Change of Name

From: To:

The merger/change of name document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

[] Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

Name: Stephen B. Maebius, Reg. No. 35,264

Title: Attorney for Applicant

Signature

Attorney Docket No.: 020359-002410US

Client Reference No.: 3715

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Yu-Chong Tai of 3191 East California Blvd., Pasadena, CA 91107; Jun Xie of 1036 East Del Mar Blvd., Apt. 101, Pasadena, CA 91106; and Qing He of 1001 East Villa St., Apt. #8, Pasadena, CA 91106; CA 91773, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

MICROFLUIDIC DEVICES AND METHODS WITH

ELECTROCHEMICALLY ACTUATED SAMPLE

PROCESSING

Filing Date:

June 24, 2003

Application No.:

10/603,573; and

WHEREAS, California Institute of Technology, a university, located at 1200 E. California Blvd., Pasadena, California 91125, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:

1/22/04

21/21/04

Dated:

01/21/04

Yu-Chong Tai

Jun Xie

Qing He

60118483 vl



PTO/SB/81 (11-04)
Approved for use through 11/30/2005. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC U.S. Patent u.S

POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM

Application Number	10/603,573				
Filing Date	June 24, 2003				
First Named Inventor	Yu-Chong TAI				
Title	Mircrofluidic Devices and				
Art Unit	1753				
Examiner Name	Not Yet Known				
Attorney Docket Number	049411-0248				

r.:								
I hereby revoke all previous powers of attorney given in the above-identified application.								
I hereby appoint	:							
Practitioners associated with the Customer Number:				22428				
OR		•						
Practitioner(s)	Practitioner(s) named below:							
		Name		Registration Number				
								4
					· · · · · · · · · · · · · · · · · · ·			4
				<u></u>				4
								4
<u> </u>					 			ال
as my/our attorney(s) Trademark Office coi) or agent(: nnected th	 s) to prosecute the application is erewith. 	identified a	above, and to	transact all busin	ess in the	United States Patent a	na
						···		
l — ·	change the	correspondence address for the	he above-i	identified appl	lication to:			
	s associate	ed with the above-mentioned C	ustomer N	lumber:		_		
OR								
The address	s associat	ed with Customer Number:						
OR								
Firm or Individua	i Name							
Address	. , , , , , , ,						· · · · · · · · · · · · · · · · · · ·	
City				State			Zip	
Country				<u> </u>				
Telephone				Fax				
l am the:								
Applicant/Inv	entor.							
Assignee of Statement u.	Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)							
SIGNATURE of Applicant or Assignee of Record								
Signature						Date	1/21/03	
Name	Larry A. (A. Couture, Ph.D				elephone	626-256-8728	
Title and Company	Title and Company Senior Vice President, Center for Applied Technology Development							
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.								
*Total of	f	orms are submitted.						

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 049411-0248

In re patent application of Yu-Chong TAI, et al.

Group Art Unit: 1753

Serial No. 10/603,573

Examiner: Not Yet Known

Filed: June 24, 2003

For: Microfluidic Devices And Methods With

Electrochemically Actuated Sample Processing

CERTIFICATE UNDER 37 C.F.R. §3.73(b)

We, <u>City of Hope</u>, a non-profit public benefit corporation of the state of California, together with California Institute of Technology, a corporation of the state of California, certify that we are the assignees of the entire right, title and interest in the patent application identified above by virtue of either:

A. [X] An assignment from inventor **Terry D. LEE** of the patent application identified above, for which a copy thereof is attached. OR B. [] A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below: 1. Assignment From: To: The assignment document was recorded in the Patent and Trademark Office at Reel_____, Frame _____, or for which a copy thereof is attached. 2. Assignment From: To: The assignment document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. §

3.73(b). A copy of this document and the recordation sheet is attached.

Serial No. 10/603,573 Attorney Docket No. 049411-0248

3. Merger/Change of Name

From: To:

The merger/change of name document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

[] Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:	1/21/03
Name:	Larry A. Couture, Ph.D.
Title:	Sr. Vice President, Center for Applied Technology Development
Signatu	re:

Attorney Docket No.: 020359-002410US

Client Reference No.: 3715

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Terry Dwight Lee of 641 Cottonwood Lane, San Dimas, CA 91773, hereinafter referred to as "Assignor," is one of the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

MICROFLUIDIC DEVICES AND METHODS WITH

ELECTROCHEMICALLY ACTUATED SAMPLE

PROCESSING

Filing Date:

June 24, 2003

Application No.:

10/603,573; and

WHEREAS, CITY OF HOPE, a non-profit public benefit corporation of the State of California, with a place of business at 1500 East Duarte Road, Duarte, California 91010-0269 hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Leiters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewell, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that he will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed his name on the date indicated.

Dated:

60107239 v1

Percy Dylight Lee